Dear Raja, I will have class at 11:00 and miss the meeting. Here is my
progress report.

1- Romulus has the Palmer ring coded in to GEANT3.

2- A coarse field map has been created and implementation in to GEANT
debugged, including geometry issues and some interpolation issues.
Some 2nd ordereffects need to be revisited.

3- Rick has supplied me with the code to compare his current sheet approx
(BSHEET) with my "BIOT" SAVART integration. BSHEET and "BIOT" agree exactly for a simple solenoidal coil on and off axis.

3- Discrepancies occur when the ring is modeled. I can only guess that these are due to some trig rotations which I am looking in to. There is also an overall normalization problem, See Figure:

Single Coil Study-
In the plots I show a single coil (500cm in z) at a point (z=0) on our 33cm ring. We see a z=0.0-2.75 m scan of the fields given by BSHEET and BIOT .
I am looking in to these differences. BSHEET is producing higher fields for the single coil in all cases. This translates in to the 24 coil differences that we have seen already.

SINGLE SOLENOID at r0=33./2π